

Find the sum or difference.

a. $(3f^2 - f^4 + 2f) + (3f^4 - 5 + 7f^2)$

$$\begin{array}{r} -f^4 + 3f^2 + 2f \\ 3f^4 + 7f^2 - 5 \\ \hline \end{array}$$

$$2f^4 + 10f^2 + 2f - 5$$

b. $(10x^4 - 3x^2 + 2) - (3x^3 + 2x^2 - 13)$

$$10x^4 - 3x^2 + 2 - 3x^3 - 2x^2 + 13$$

$$10x^4 \quad -3x^2 + 2$$

$$\quad -3x^3 - 2x^2 + 13$$

$$\hline 10x^4 - 3x^3 - 5x^2 + 15$$

c. $(3x^2 - 2x + 8) - (x^2 - 4)$

$$3x^2 - 2x + 8 - x^2 + 4$$

$$\begin{array}{r} 3x^2 - 2x + 8 \\ -x^2 \quad + 4 \\ \hline \end{array}$$

$$2x^2 - 2x + 12$$

d. $(10p^2 + 5) - (7p^2 - 2p + 3)$

$$10p^2 + 5 - 7p^2 + 2p - 3$$

$$\begin{array}{r} p^2 \quad p \quad 1 \\ 10p^2 \quad + 5 \\ -7p^2 \quad + 2p \quad - 3 \\ \hline \end{array}$$

$$3p^2 + 2p + 2$$

$$3p^2 + 2p + 2$$

$$e. (3m^3 - 6m^2 + m - 1) - (-2m^2 + 7m)$$

$$3m^3 - 6m^2 + m - 1 + 2m^2 - 7m$$

$$3m^3 - 6m^2 + m - 1$$

$$+ 2m^2 - 7m$$

$$3m^3 - 4m^2 - 6m - 1$$

$$f. (5 - 3x - 1.4x^2) - (13.7x - 62 - 5.6x^2)$$

$$\underline{5 - 3x - 1.4x^2 - 13.7x + 62 + 5.6x^2}$$

$$-1.4x^2 - 3x + 5$$

$$+ 5.6x^2 - 13.7x + 62$$

$$4.2x^2 - 16.7x + 67$$

$$\begin{array}{r} 5.6 \\ -1.4 \\ \hline 4.2 \end{array}$$

$$\begin{array}{r} 3.0 \\ 13.7 \\ \hline 16.7 \end{array}$$

Sec. 9.2 Polynomial Multiplication

$$x \cdot x = x^2$$

$$a. \quad 6x(2x - 3)$$

$$6x \cdot 2x + 6x(-3)$$

$$12x^2 - 18x$$

$$b. \quad (x + 3)(x - 10)$$

$$x(x - 10) + 3(x - 10)$$

$$x \cdot x + x(-10) + 3 \cdot x + 3(-10)$$

$$x^2 - 10x + 3x - 30$$

$$x^2 - 7x - 30$$

$$c. \quad (x + 2)(x - 9)$$

$$x(x - 9) + 2(x - 9)$$

p. 436 (23-41) odd Due
Thurs.